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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/653,656

09/01/2000

Lior Shabtay

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5487

7590

10/19/2004

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EXAMINER

JUNG, MIN

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,656

Applicant(s)

SHABTAY ET AL.

Examiner

Min Jung

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5-27-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Bernstein et al., 6,157,644 (Bernstein).

Bernstein discloses a method and apparatus for accelerating OSI layer 3 routers.

Specifically, Bernstein teaches a method of accelerating the routing of frames by an acceleration switch within a network, comprising: receiving, by the acceleration switch, frames directed to one of one or more routers or switches of the network (col. 6, lines 15-21, step 900 of Fig. 9); determining, for at least some of the received frames, whether the frames belong to a first list of frame groups, defined by values of a plurality

Art Unit: 2663

of frame parameters (col. 6, lines 21-25, steps 904, 906, and 908 of Fig. 9); and routing, by the acceleration switch, at least some of the received frames, the routed frames being selected responsive to the determining (col. 7, lines 4-22, steps 910, 912, and 914 of the leftmost flow in Fig. 9).

Bernstein further teaches : receiving frames which have a layer-2 destination address of a router or a switch (Abstract, lines 10-16, col. 3, lines 11-15); routing the frames based on, substantially only, the destination addresses of the frames (col. 6, lines 21-25); routing the received frames using information in an entry of the first list of frame groups which matches the routed frame (col. 6, line 21 – col. 7, line 22); routing frames which were determined to belong to a group in the first list (col. 5, lines 28-32); determining for substantially all the received frames whether the frames belong to a first list of frame groups (col. 6, lines 21-25, steps 904, 906, and 908 of Fig. 9); determining for frames which may require access control, and for frames of a connectionless protocol (as shown by the MAC frames and datagram packets, Fig. 2 and Fig. 4); the first list of frame groups comprising a list of groups which include frames routed by one or more routers or switches of the network, and a list of groups which include frames recently routed by one or more routers or switches of the network (col. 5, lines 28-32, col. 7, lines 4-22); layer-2 source address and layer-2 destination address (Fig. 3); the first list of frame groups listing only groups including frames transmitted to and received from the routers or switch (Figs 10A and 10B); the plurality of parameters which define the frame groups comprise at least one parameter in addition to the IP destination address (col. 6, lines 1-5, i.e., next hop address); and parameters which define the

frame groups comprising the source port of destination port of the frames (col. 6, lines 1-5).

Bernstein further teaches an acceleration switch having the corresponding functions of the method claimed. Specifically, Bernstein teaches an acceleration switch (Fig. 6) comprising a table listing groups of frames defined by a plurality of parameters of the frames (610); a table trainer which creates entries in the table responsive to frames received by the switch (620); a comparator which determines whether the frames belong to one of the groups in the table (614, 616) ; and a routing unit which routes frames directed to at least one router of routing switch for which the comparator found a matching group in the table (614, 610, 606). See col. 5, lines 34-65.

Bernstein teaches the functions recited as further limitations (claims 38-45) as addressed above in connection with the method claims.

Regarding claims 46-48, the limitation regarding "the violation of policy rules" reads on the situation shown in the decision blocks of 908 and/or 916 of Fig. 9, in which decisions are made depending on whether the destination is found in the table, and whether the packet is from the switch. The criteria of violation of policy rules can read on the situation that the destination is (or is not) found in the table. See Fig. 9.

Response to Arguments

3. Applicant's arguments filed May 27, 2004 have been fully considered but they are not persuasive.

Applicant's argument can be summarized as that Bernstein does not teach the claim step of "determining, for at least some of the received frames, whether the frames belong to a first list of frame groups, defined by values of a plurality of frame parameters" (sole point argued by applicant). Examiner disagrees with applicant's argument. For the determining step, Examiner relied on the steps shown at blocks 904, 906, and 908 in Fig. 9 of Bernstein. When a frame is received, the decision blocks 906 and 908 decide whether the extracted destination information is in the table. Based on the decision, one frame group will follow the path indicated by a "YES", and the other frame group will follow the path indicated by a "NO". Therefore, this decision covers the claim limitation requiring determination of whether the frames belong to a frame group, with the destination address reading on the frame parameter.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2663

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday, Tuesday, and Thursday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
October 15, 2004


Min Jung
Primary Examiner